WATER TRANSFER WORKING GROUP PROJECT DESCRIPTION

APPLICATION NO./COURT CLAIM NO.		
Water Budget Neutral Request No. G4-35567 with mitigation from Trust Water Right No. S4-02255(A)CTCL@2		
APPLICANT NAME John Jenson	CONTACT NAME Kurt Walker - Ecology	TELEPHONE NO. 509-454-4237
WATER RIGHT HOLDER'S NAME (if different) Mitigation with SwiftWater Ranch LLC Trust Water Right		EMAIL kwal461@ecy.wa.gov

DATE OF APPLICATION	PRIORITY DATE
June 27, 2012	New use mitigated by trust water right with priority date of June 30, 1890

WATER SOURCE: Well (Ecology Well Tag: APB013)	CROP: Lawn or noncommercial garden
INSTANTANEOUS QUANTITY:	ANNUAL QUANTITY: 0.414 acre-ft/yr
PERIOD OF USE: Continuous for single indoor domestic connection and irrigation season for lawn and garden	
PLACE OF USE: Parcel No. 11339, located within SW¼SW¼ of Section 34, T. 20 N., R. 16 E.W.M.	PURPOSE OF USE: Single domestic and Irrigation of 500 ft^2 lawn or garden
IRRIGATION METHOD:	

CONSUMPTIVE USE CALCULATION:

Indoor use: One residential connection at 350 gallons per day (gpd) used continuously year round equates to 0.392 ac-ft/yr of water use, or:
(350 gpd per connection) x (365 days) x (one connection) x (1.0 ac-ft/325,851gal) = 0.392 afy
Consistent with WAC 173-539A-050(3), 30% of domestic in-house use on a septic system is consumptively used, therefore:
Indoor consumptive use = (0.392 afy) x (0.30) = **0.118 ac-ft/yr**

Outdoor use: The requestor proposes to irrigate 500 ft^2 of lawn and garden. Using a crop irrigation requirement of 18.11 in/yr (or 1.51 ft/yr) for pasture/turf near Cle Elum from the Washington Irrigation Guide and an application efficiency of 80%, the total outdoor irrigation water use is 0.022 ac-ft/yr, or:
[(1.51 ft/yr) ÷ 0.80] x (500 ft^2 ÷ 43560 ft^2/ac) = 0.022 ac-ft/yr
Consistent with WAC 173-539A-050(3), 90% of outdoor use is consumptively used, so:
Outdoor consumptive use = (0.022 ac-ft/yr) x (0.90) = **0.019 ac-ft/yr**

As a result consumptive use (CU) for the project totals to 0.137 ac-ft/yr
(CU April 1 to Aug 31 is 0.065 ac-ft and CU Sept 1 to Mar 31 is 0.072 ac-ft)

For detailed analysis of month-to-month uses see spreadsheet below.

NARRATIVE DESCRIPTION OF PROJECT:

The requestor proposes to offset the 0.137 ac-ft/yr of consumptive use for the project (one residential connection and 500 ft^2 of lawn and garden) with 0.137 ac-ft/yr of mitigation water acquired from Trust Water Right No. S4-02255(A)CTCL@2. During the irrigation season, 0.017 ac-ft is assigned to the USBR-Ecology Exchange Contract (Contract No. 09XX101700) and released between September 15 and October 31 to address out of season impacts along the Yakima River.

The proposed well for the new use is to be located in an "green" area as noted on the SwiftWater Ranch LLC suitability map. Review of the local area hydrogeology suggests that the proposed groundwater withdrawals will impact the lower Teanaway River and Yakima River. For questions regarding the project area hydrogeology with respect to G4-35567, please contact Kurt Walker at (509) 454-4237, kwal461@ecy.wa.gov.

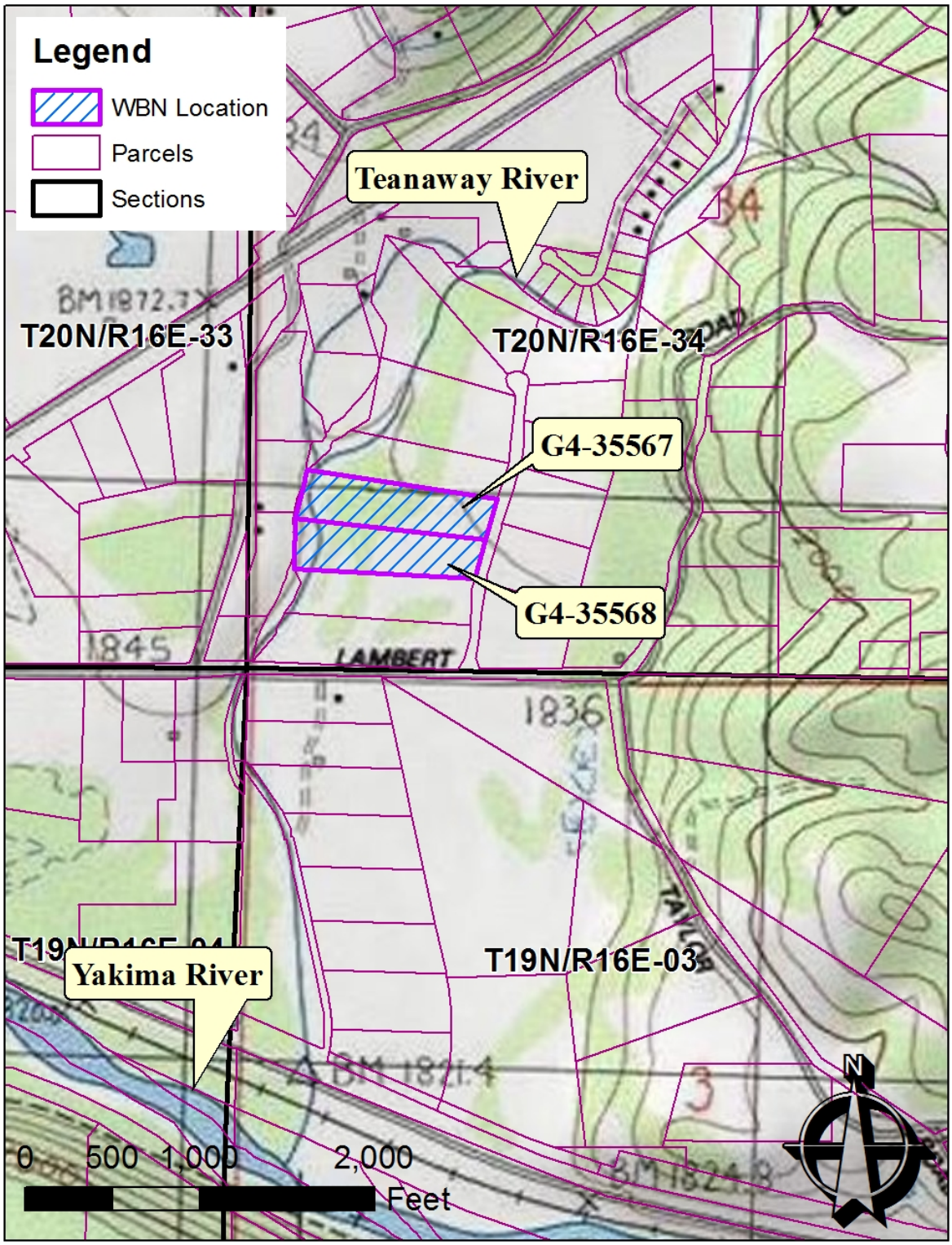
WTWG Project form

SwiftWater In-basin Mitigation: Consumptive Use Calculator for WBN form and Contract water form: WRTS No. G4-35567 (Jenson)

Use for calculation for late season (9-15 to 10-31) Exchange Contract assignment

Assumptions for Irrigation:					Assumptions for Domestic:				
Assumed efficiency	0.8				total use per ERU	350	gpd		
% CU for outdoor use	0.9	per WAC			total use per ERU	0.001074	af per day		
Square feet to irrigate	500				#ERU	1			
Acreage	0.011				% CU	0.3	for septic system		
	Irrigation portion:				Indoor Domestic portion:				
	WIG (in/yr)	**TIR per ac (AFY/ac)**	**TIR (afy)**	**CU (afy)**	**total use (AFY)**	**CU (AFY)**	**Total CU (afy)**		
Jan	0.00				0.0333	0.0100	0.0100		
Feb	0.00				0.0301	0.0090	0.0090		
Mar	0.00				0.0333	0.0100	0.0100		
Apr	0.00				0.0322	0.0097	0.0097		
May	0.00				0.0333	0.0100	0.0100		
Jun	3.34	0.3479	0.004	0.004	0.0322	0.0097	0.0133		
Jul	6.50	0.6771	0.008	0.007	0.0333	0.0100	0.0170		
Aug	4.79	0.4990	0.006	0.005	0.0333	0.0100	0.0151		
Sept	3.47	0.3615	0.004	0.004	0.0322	0.0097	0.0134	9/16-9/30: Contract	
Oct	0.00				0.0333	0.0100	0.0100		
Nov	0.00				0.0322	0.0097	0.0097		
Dec	0.00				0.0333	0.0100	0.0100		
Total	**18.11**		**0.022**	**0.019**	**0.392**	**0.118**	**0.137**		

Results:						shaded cells= contract water
For WBN form:						
Total CU	**0.137**	AFY				
Total use	**0.414**	AFY				
For Contract form:				**contract cost**	$13.84	
CU (Nov 1 to Sept 15)	**0.120**	AFY		($22 per afy of assigned water for 37 years)		
CU (Sept 16 to Oct 31)	**0.017**	AFY				
Contract water	**0.017**	AFY	Assumes end of TWR IR season is 9/15 and latest diversionary needs downstream on Yakima are Oct 31			
Total to add to IF at Parker:	**0.000**	AFY	Tributary TWR; see Exchange Contract Section 14(c)(1)			
Total to debit from TWR:	**0.137**	AFY	(Total CU) + (Total to add to IF at Parker)			


Legend
WBN Location
Parcels
Sections
Teanaway River
T20N/R16E-33
T20N/R16E-34
G4-35567
G4-35568
LAMBERT
1845
1836
T19N/R16E-03
Yakima River
0 500 1,000 2,000
Feet
N